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|---|-------------|----------------------|---------------------|------------------|
| 10/812,426  | 03/30/2004  | Tony A. Cutshall     | DEP 5069            | 3354             |
| 27777   | 7590        | 06/15/2010           |                     |                  |
| PHILIP S. JOHNSON<br>JOHNSON & JOHNSON<br>ONE JOHNSON & JOHNSON PLAZA<br>NEW BRUNSWICK, NJ 08933-7003 |             |                      |                     |                  |
|   |             |                      | EXAMINER            |                  |
|   |             |                      | CARTER, TARA ROSE E |                  |
|   |             | ART UNIT             | PAPER NUMBER        |                  |
|   |             | 3733                 |                     |                  |
|   |             | NOTIFICATION DATE    | DELIVERY MODE       |                  |
|   |             | 06/15/2010           | ELECTRONIC          |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jnjuspatent@corus.jnj.com

lhowd@its.jnj.com

gsanche@its.jnj.com

### Office Action Summary

**Application No.**

10/812,426

**Applicant(s)**

CUTSHALL ET AL.

**Examiner**

TARA R. CARTER

**Art Unit**

3733

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8-10, 12-19 and 21-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10, 12-19 and 21-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. (US Pat. 7048740) in view of Khalili (US 6027503).

White discloses a reamer comprising a body 420 including a peripheral surface defined by a radius extending from an origin, said body defining an axis of rotation thereof, said body defining an end surface operably connected to peripheral surface and, said body defining a relief surface spaced from the axis of rotation and operably connected to the peripheral surface, wherein a peripheral surface is a hemisphere, with its edges defined by the end surface and the relief surface (see Figure 25 below); a cutter 426 operably associated with said body; a driver connector 442 directly coupled to the end surface (see fig. 26 and note that 441 and 440 and thus, 442, are directly coupled- see col. 12 lines 35-40); and a support structure 441 secured to the relief surface of said body (see Figure 25 below and col. 10 lines 63-67 and col. 11 lines 1-15), the support surface being spaced from the driver connector (via 440- see fig. 26).

White further teaches that the end surface of said body can be generally planar and perpendicular to the axis of rotation of said body; and the cutter and said body can

be integral with each other (see Figure 25 below and col. 10 lines 63-67 and col. 11 lines 1-15). The body can also have a general form of a hollow, truncated hemisphere (see Figure 25 below and col. 10 lines 63-67), and the relief surface of said body can also be generally planar and parallel to the axis of rotation (see Figure 25 below). The body can also define a second relief surface spaced from the first mentioned relief surface (see Figures 25 and 29) wherein the second relief surface can define a width dimension therebetween, the width dimension being substantially smaller than twice the radius of said body (see Figure 25 below). The reamer can also further comprise second and third support structures (see fig. 29 and note elements 440 a, b and c) secured to the second relief surface and secured to both first and second support structures for interconnecting said support structures, respectively. Both first and second support structures are spaced inwardly from the driver connector (via 440, see fig. 26; also note fig. 29 and that the driver connector is a bayonet connection). The reamer can also further comprise a driver (see col. 11 lines 7-15). The support structure can also be integral with said body (see col. 1 lines 13-15), and can also comprise one of a rib, a gusset, a bar, a tube, and a plate (see Figure 25 below and col. 11 lines 13-15). The support structure extends substantially along the relief surface of said body (see Figure 25 below). White further discloses a method comprising providing a cutting tool as disclosed above, cutting an incision in the patient, using the cutting tool to prepare a cavity for the prosthesis; and implanting the prosthesis (see col. 1 lines 20-32, col. 2 lines 44-51 and col. 6 lines 10-20).

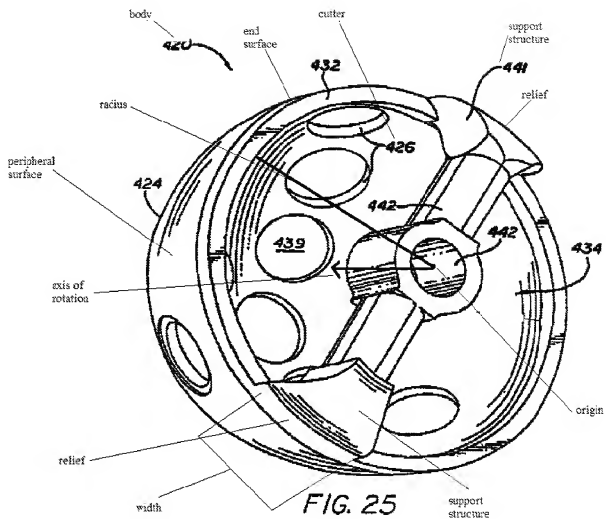
With regards to claims 9, 10, 14, 23, 26 and 33 White discloses angles between the relief surfaces as shown by figures 25, 28 and 29 but does not appear to specifically disclose wherein said angle is less than 90 degrees and the distance between the first and second relief surfaces is less than  $\frac{2}{3}$  of the radius of the body.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the reamer of White with the first and second relief surfaces defining an included angle therebetween, wherein said angle can be less than 90 degrees, and the distance between the first and second relief surfaces is less than  $\frac{2}{3}$  of the radius of the body, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

White teaches the claimed invention except for the peripheral surface specifically being a truncated hemisphere.

Khalili teaches a reamer with a truncated hemisphere in order to remove smaller amounts of bone and provide for a high quality interference fit of prosthesis with portions of the acetabulum where the bone is strongest (col. 2 line 47 – col. 3 line 15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the shape of the reamer of White in view of Khalili in order to allow for a minimally invasive approach wherein the surgeon will remove smaller amounts of bone and provide for a high quality interference fit of prosthesis with portions of the acetabulum where the bone is strongest.



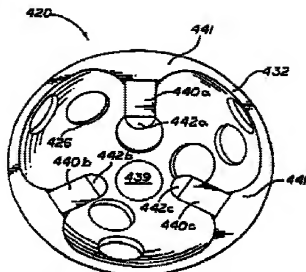


FIG. 28

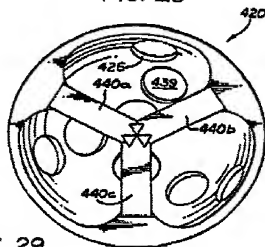


FIG. 29

### ***Response to Arguments***

Applicant's arguments of 5/25/10 with respect to claims 1-34 are persuasive as White does not appear to provide motivation for modifying the design of the reamer shape. Thus, the Final Rejection of 3/26/10 has been withdrawn. However, a new rejection of claims 1-34 has been made in view of White and Khalili.

White teaches several embodiments of reamers, each comprising different configurations of driver connectors and support structures. White teaches the structure of the relief surfaces and support structures being spaced inwardly from said relief surfaces and towards the origin. Khalili is relied upon for the teaching of a reamer shaped as a truncated hemisphere (less than 180 degrees) as stated above in the rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TARA R. CARTER whose telephone number is (571) 272-3402. The examiner can normally be reached on 7am-3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EDUARDO C. ROBERT can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 3733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. R. C./

Examiner, Art Unit 3733

/Eduardo C. Robert/

Supervisory Patent Examiner, Art Unit 3733